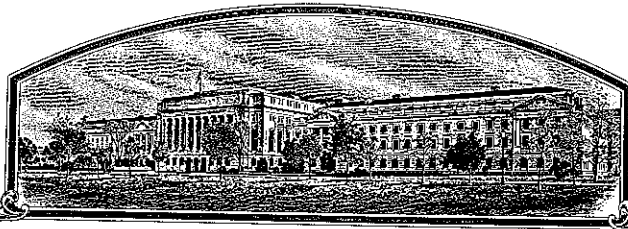


No.



9600143

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Jacob Hartz Seed Co., Inc.**

Whereas, THERE HAS BEEN PRESENTED TO THE

**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

**SOYBEAN**

**'Hartz Variety H 6255'**



Attest:

*Samuel M. ...*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of July in the year of our Lord one thousand nine hundred and ninety-nine.*

*Samuel H. ...*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Jacob Hartz Seed Co., Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER H88-4644	3. VARIETY NAME Hartz Variety H 6255
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) P.O. Box 946 901 N. Park Avenue Stuttgart, AR 72160		5. TELEPHONE (include area code) 870 JCS, 8/11/1999 (501) 673-8565	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER 9600143 DATE FEB 20, 1996 FILING AND EXAMINATION FEE 2450.00 DATE 2-20-96 CERTIFICATION FEE 300.00 DATE 8/30/99
6. FAX (include area code) (501) 673-2838		7. GENUS AND SPECIES NAME Glycine max	
8. FAMILY NAME (Botanical) Leguminosea		9. CROP KIND NAME (Common name) Soybean	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) Corporation			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware		12. DATE OF INCORPORATION 1984	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Dr. Edward A. Brown Jacob Hartz Seed Co., Inc. P.O. Box 946 Stuttgart, AR 72160			14. TELEPHONE (include area code) (501) 673-8565
			15. FAX (include area code) (501) 673-2838
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)? <input type="checkbox"/> YES If "yes," answer items 18 and 19 below <input checked="" type="checkbox"/> NO If "no," go to item 20			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES If "yes," give names of countries and dates <input type="checkbox"/> NO United States of America; on February 27, 1995 to present date of application.			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.			
Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) Edward A. Brown		SIGNATURE OF APPLICANT (Owner(s))	
NAME (Please print or type) Edward A. Brown		NAME (Please print or type)	
CAPACITY OR TITLE Director Soybean Research		CAPACITY OR TITLE	
DATE 12/21/95		DATE	

EXHIBIT A

## ORIGIN AND BREEDING HISTORY

## HARTZ VARIETY H6255

Summer 1985	Original cross made at Stuttgart, AR. Cross number was 85177 Parentage: Young x Hartz 7126 Young = Essex x Davis Hartz 7126 = Forrest x Ransom
Winter 1985-86	F1 grown in winter nursery in Belize, C. A.
Summer 1986	F2 grown in field in Stuttgart, AR.
Winter 1986-87	F3 and F4 advanced by modified single-seed descent in Belize, C. A.
Summer 1987	F5 grown as bulk population at Stuttgart, AR, single plants harvested.
Summer 1988	F6 plant rows grown at Stuttgart, AR. Row number 4644 harvested.
Summer 1989	Yield tested in preliminary trials at Stuttgart, AR.
Summer 1990-1995	Yield tested in Hartz Seed Co. tests in AR/MS/LA/GA/NC/SC. Screened for reaction to selected root, stem and foliar diseases and to soybean cyst and root-knot nematodes.
Summer 1993	Yield tested in state experiment station new strains test in AR/MS/LA. Grew 0.1 acre breeder seed increase in 1993.
Summer 1994-95	Yield tested in state experiment station commercial variety tests in AR/MS/LA/NC/SC/GA. Grew 5.0 acre breeder seed increase in 1994.
Evidence of Stability:	Hartz Variety H6255 has been grown in breeder and production increases for three years and has remained uniform to type and stable within commercially accepted limits.

## Kinds of Frequency of Variants Observed:

Plants with white flowers and gray pubescence have been observed at a frequency 0.001% or about 4 seeds/lb. Plants with purple flowers and tawny pubescence have been observed at a frequency of about 0.00025% or 1 seed/lb. Plants with white flowers and tawny pubescence have been observed at a frequency of about 0.00025% or 1 seed/lb.

EXHIBIT B  
Novelty Statement

To our knowledge 'Hartz Variety H6255' most closely resembles the variety 'Young', but 'Hartz Variety H6255' has purple flowers whereas 'Young' has white flowers.

OBJECTIVE DESCRIPTION OF VARIETY  
SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) Jacob Hartz Seed Co., Inc.	TEMPORARY DESIGNATION H88-4644	VARIETY NAME Hartz Variety H6255
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) P.O. Box 946 901 N. Park Avenue Stuttgart, AR 72160		FOR OFFICIAL USE ONLY PVPO NUMBER 9600143

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,  ). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)  
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)

2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)  
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ 2. SEED COAT COLOR: (Mature Seed)

1 = Yellow

2 = Green

3 = Brown

4 = Black

5 = Other (Specify) \_\_\_\_\_

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Consoy 79'; 'Braxton')

2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ 4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

★ 5. HILUM COLOR: (Mature Seed)

1 = Buff

2 = Yellow

3 = Brown

4 = Gray

5 = Imperfect Black

6 = Black

7 = Other (Specify) \_\_\_\_\_

★ 6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow

2 = Green

★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low

2 = High

★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP1<sup>a</sup>)

2 = Type B (SP1<sup>b</sup>)

★ 9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis')

2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')

3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')

4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

★ 10. LEAFLET SHAPE:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Specify) \_\_\_\_\_

## 11. LEAFLET SIZE:

☐ 21 = Small ('Amsoy 71'; 'A5312')  
3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

## 12. LEAF COLOR:

☐ 21 = Light Green ('Weber'; 'York')  
3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

## ★ 13. FLOWER COLOR:

☐ 2

1 = White

2 = Purple

3 = White with purple throat

## ★ 14. POD COLOR:

☐ 1

1 = Tan

2 = Brown

3 = Black

## ★ 15. PLANT PUBESCENCE COLOR:

☐ 1

1 = Gray

2 = Brown (Tawny)

## 16. PLANT TYPES:

☐ 21 = Slender ('Essex'; 'Amsoy 71')  
3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

## ★ 17. PLANT HABIT:

☐ 1

1 = Determinate ('Gnome'; 'Braxton')

3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

2 = Semi-Determinate ('Will')

## ★ 18. MATURITY GROUP:

☐ 0 ☐ 9

1 = 000

2 = 00

3 = 0

4 = I

5 = II

6 = III

7 = IV

8 = V

9 = VI

10 = VII

11 = VIII

12 = IX

13 = X

## ★ 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

## BACTERIAL DISEASES:

★

☐ 2Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)

★

☐ 0Bacterial Blight (*Pseudomonas glycinea*)

★

☐ 2Wildfire (*Pseudomonas tabaci*)

## FUNGAL DISEASES:

★

☐ 0Brown Spot (*Septoria glycines*)Frogeye Leaf Spot (*Cercospora sojina*)

★

☐

Race 1

☐

Race 2

☐

Race 3

☐

Race 4

☐

Race 5

☐ 2Other (Specify)  
Race Undetermined☐ 0Target Spot (*Corynespora cassiicola*)☐ 2Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)☐ 0Powdery Mildew (*Microsphaera diffusa*)

★

☐ 0Brown Stem Rot (*Cephalosporium gregatum*)☐ 2Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

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FUNGAL DISEASES: (Continued)

- ★ ☒ 2 Pod and Stem Blight (*Diaporthe phaseolorum* var. *sojae*)
- ☒ 2 Purple Seed Stain (*Cercospora kikuchii*)
- ☒ 0 Rhizoctonia Root Rot (*Rhizoctonia solani*)
- Phytophthora Rot (*Phytophthora megasperma* var. *sojae*)
- ★ ☒ 1 Race 1 ☒ 1 Race 2 ☒ 1 Race 3 ☒ 1 Race 4 ☐ 0 Race 5 ☐ 0 Race 6 ☒ 1 Race 7
- ☐ 0 Race 8 ☐ 0 Race 9 ☐ Other (Specify) \_\_\_\_\_

VIRAL DISEASES:

- ☒ 2 Bud Blight (Tobacco Ringspot Virus)
- ☐ 0 Yellow Mosaic (Bean Yellow Mosaic Virus)
- ★ ☐ 0 Cowpea Mosaic (Cowpea Chlorotic Virus)
- ☒ 2 Pod Mottle (Bean Pod Mottle Virus)
- ★ ☒ 2 Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

- Soybean Cyst Nematode (*Heterodera glycines*)
- ★ ☒ 1 Race 1 ☒ 1 Race 2 ☒ 1 Race 3 ☐ Race 4 ☒ 1 Other (Specify) 9, 14
- ☐ 0 Lance Nematode (*Hoplolaimus Colombus*)
- ★ ☒ 1 Southern Root Knot Nematode (*Meloidogyne incognita*)
- ★ ☐ 0 Northern Root Knot Nematode (*Meloidogyne Hapla*)
- ☒ 1 Peanut Root Knot Nematode (*Meloidogyne arenaria*)
- ☐ 0 Reniform Nematode (*Rotylenchulus reniformis*)
- ☐ OTHER DISEASE NOT ON FORM (Specify): \_\_\_\_\_

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ★ ☐ 0 Iron Chlorosis on Calcareous Soil
- ☐ Other (Specify) \_\_\_\_\_

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ☐ 0 Mexican Bean Beetle (*Epilachna varivestis*)
- ☒ 2 Potato Leaf Hopper (*Empoasca fabae*)
- ☐ Other (Specify) \_\_\_\_\_

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Young	Seed Coat Luster	
Leaf Shape	Davis	Seed Size	Young
Leaf Color	Young	Seed Shape	
Leaf Size	Young	Seedling Pigmentation	

21. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

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VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO SEED POD
				CM Width	CM Length	% Protein	% Oil		
Hartz Var. H6255 Submitted	151	1	79			34.4	20.1	15	2-3
Young Name of Similar Variety	155	1.5	96			35.8	19.2	14	2-3

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.J. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A<sub>2</sub> in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

# EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)  Jacob Hartz Seed Co. Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  H88-4644	3. VARIETY NAME  Hartz Variety H 6255
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)  P. O. BOX 946 901 N Park Avenue Stuttgart AR 72160	5. TELEPHONE (include area code)  870-673-8565	6. FAX (include area code)  870-673-2838
		7. PVPO NUMBER

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?  
If no, give name of country

☒ YES ☐ NO

10. Is the applicant the original breeder? If no, please answer the following:

☒ YES ☐ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country

☒ YES ☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country

11. Additional explanation on ownership (If needed, use reverse for extra space):

## PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

## EXHIBIT E

### BASIS OF APPLICANTS OWNERSHIP

Jacob Hartz Seed Company, Incorporated, Stuttgart, Arkansas, established a Plant Breeding Program in 1972 for the purpose of developing, releasing, and maintaining stocks of soybean varieties developed by its Plant Breeding Program.

Dr. Edward Brown, Plant Breeder, has been licensed to breed soybeans by the Arkansas State Plant Board. Dr. Brown and co-workers at Jacob Hartz Seed Co., Inc. developed and tested this variety at Stuttgart, AR, and other locations.

On April 23, 1983, Jacob Hartz Seed Co., Inc., was purchased by HybriTech Seed International, Inc., a wholly owned subsidiary of Monsanto, St. Louis, Missouri. Jacob Hartz Seed Co., Inc., was originally incorporated in 1948 in the State of Arkansas. In 1984, Jacob Hartz Seed Co., Inc., merged with the Monsanto-West Africa Inc., a Delaware corporation. Jacob Hartz Seed Co., Inc. is the present name of the merged corporation which is a Delaware corporation.